

Remarks/Arguments

Claims 1-42 are pending in the application. Claims 1, 21 and 42 are independent.

Claims 1, 21 and 42 are amended. No new matter has been added by way of these claim amendments.

New independent claim 43 is added, directed to an embodiment wherein the access request is based on certain keywords included in the request content.

Claim 1 as amended recites: *a method for providing dynamic interaction between a pair of application programs by an interface module of a terminal, the pair of applications including a requestor application desiring access to a target application, the method comprising the steps of:*

registering access information of the target application, the access information including published access information made available in a data structure for retrieval by the interface module;

receiving an access request by the interface module from the requestor application, the access request including content corresponding to the published access information of the target application;

obtaining an interface component by using the request content to search the data structure, the interface component configured for enabling communication between the interface module and the target application in an access format expected by the target application; and

employing the interface component by the interface module to satisfy the access request of the requestor application for interaction with the target application.

The Examiner has rejected claims 1-7, 12-14, 19-27, 32-34 and 39-42 under 35 U.S.C. 102(e) as being anticipated by Slaughter, US patent no. 7,458,082. Applicant respectfully traverses the rejections.

As described in the Background of the application as filed, the problem the subject invention addresses relates to communication between related applications. Specifically, if an application interface changes, it is also required to change many, or all, of the related or dependent applications to maintain compatibility and interoperability.

The solution as disclosed provides an interface module that facilitates the communication between a requestor application and a target application. The target application registers access information, such as an application name and its corresponding parameters. The requestor application submits an access request for the target application, which is received by the interface module. The requestor application also provides content corresponding to the published access information of the target application.

The interface module uses the received information (in a generic format such as XML, for example) to obtain an interface component, which is configured to enable communication between the interface module and an access format expected by the target application. The interface component is then used by the interface module to satisfy the access request.

In the Advisory Action dated 09/24/2009, the Examiner pointed out, in the Continuation of Item 11, that the message layer 104 and the API layer 102 of Slaughter are corresponding features to the interface module and the interface component, respectively, of the present application.

There are a number of elements of claim 1 that are not present in Slaughter.

Firstly, there is no teaching of the messaging layer 104 of Slaughter *"receiving an access request from the client including content corresponding to published access information"*. Slaughter is silent regarding the form of the request from a client/ requestor, specifically that the access request includes content related to the published access information, for instance via certain keywords. In contrast, the present application provides an example of this feature, wherein for example, the access request is based on certain keywords included in the request content:

Example: API lookup using keyword scoring algorithm, referring to Figure 3.

1. Application A is a Calendar application 107 that registers its API 124 in the table 302 specifying API keywords 'CALENDAR', 'APPOINTMENT' and 'MEETING'.
2. Application B is a Holiday Viewer application 107 and registers its API 124 specifying API keywords 'CALENDAR' and 'HOLIDAY'.
3. Based on the above, an Application C is a Service Call Planner application 107 executing a dynamic lookup using the API 124 lookup keywords 'CALENDAR' and 'APPOINTMENT'. Accordingly, the interaction module 312 returns the API Descriptor of application A from the table 302, as it scored more in keyword match. The Application C can validate the retrieved API Descriptor and, if satisfactory, could lookup the corresponding application 107 (or handler 122) identifier via the table 300 for the returned API instance. In this example, Application C would then access application A (e.g. best match) using the standard interaction protocol of the interaction module 312 as described above in reference to Figure 4.

Secondly, Slaughter does not disclose *"obtaining an interface component by using the request content to search the data structure....."*.

Slaughter discloses at Col. 11 Lns. 9-13 that "The API layer 102 is concerned with the discovery of and the connecting of clients and services. The API layer 102 provides send message and receive message capabilities. This messaging API may provide an interface for simple messages in a representative data or meta-data format, such as the eXtensible Mark-up Language (XML)." Yet further, Col.11 Lns. 30-32 provide "In one embodiment, XML messages are generated by messaging layer 104 according to calls to the API layer 102."

However, there is no disclosure in Slaughter as to how an appropriate API is obtained, such as for example, by using the request content of the target/service, as disclosed in the claim 1 feature of *"obtaining an interface component by using the request content to search the data structure....."*.

Therefore, for at least the reasons discussed above, Applicant submits claim 1 is patentable in view of Slaughter and, as such, requests that the rejection of claim 1 be withdrawn.

Independent claims 21 and 42 include similar limitations as claim 1, and therefore a corresponding argument applies. Accordingly, Applicant submits that the rejection to these claims be withdrawn for at least the same reasons discussed above with regard to the Slaughter reference.

Since the remaining dependent claims depend from one of the above noted independent claims, Applicant submits that the rejection of these claims be withdrawn for at least the same reasons.

For the foregoing reasons, the Applicant respectfully submits that the claimed invention is patentable over the prior art. Reconsideration and allowance are respectfully requested.

Respectfully submitted,

/Henry Ohab/

Henry Ohab
Registration No. 45,854
416 862 3593

Gowling Lafleur Henderson LLP
1 First Canadian Place, Suite 1600
Toronto, Ontario, M5X 1G5

TOR_LAW\ 7240438\1